

**AMENDMENTS TO THE CLAIMS:**

The claim listing below replaces all prior versions and listings of the claims in the application.

**LISTING OF CLAIMS:**

1. (Currently Amended) An electric discharge machining method comprising the steps of:

setting a removal surface area (S);

setting a dimension of material to be removed (d);

setting a plurality of machining conditions;

obtaining a removal volume (V) corresponding to a volume of material to be removed from a workpiece based on the removal surface area (S) and the dimension of material to be removed (d);

obtaining a removal volume rate (Vm) corresponding to the set plurality of machining conditions;

determining a machining time (T) based on the removal volume (V) and the removal volume rate (Vm);

starting electric discharge machining of the workpiece in accordance with the set plurality of machining conditions; and

completing electric discharge machining of the workpiece when the machining time (T) has elapsed from the start of electric discharge machining.

2. (Cancelled)

3. (Currently Amended) An electric discharge machining method comprising the steps of:

setting a removal surface area (S);

setting a dimension of material to be removed (d);

setting a plurality of machining conditions;

obtaining a removal volume (V) corresponding to a volume of material to be removed from a workpiece based on the removal surface area (S) and the dimension of material to be removed (d);

obtaining a removal volume per single discharge ( $V_p$ ) corresponding to the set plurality of machining conditions;

determining a number of electric discharges (P) based on the removal volume (V) and the removal volume per single discharge ( $V_p$ );

starting electric discharge machining of the workpiece in accordance with the set plurality of machining conditions; and

completing electric discharge machining of the workpiece when the number of electric discharges (P) have been completed from the start of electric discharge machining.

4-6. (Canceled)